Amendment

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

30. (**Currently Amended**) A method for affecting the survival or function of neurons comprising administering a pharmaceutical composition comprising:

(a) a truncated glial cell line-derived neurotrophic factor (GDNF) protein product consisting of an amino acid sequence

$$X\text{-}(Cys^{41}\text{-}Cys^{133})\text{-}Y$$

wherein

(Cys^{41}-Cys^{133}) consists of Cys^{41} through Cys^{133} of SEQ ID NO:2;

Y represents the carboxy terminal group of Cys^{133}, a carboxy-terminus amino acid residue of Ile^{134}, or a substituted amino acid residue, and

X represents a methionylated or nonmethionylated amine group of Cys^{41} or amino-terminus amino acid residue(s) selected from the group:

	G	
	RG	
	NRG	
	KNRG	(SEQ ID NO:3)
	GKNRG	(SEQ ID NO:4)
	RGKNRG	(SEQ ID NO:5)
	QRGKNRG	(SEQ ID NO:6)
	GQRGKNRG	(SEQ ID NO:7)
	RGQRGKNRG	(SEQ ID NO:8)
	RRGQRGKNRG	(SEQ ID NO:9)
G	RRGQRGKNRG	(SEQ ID NO:10)
KG	RRGQRGKNRG	(SEQ ID NO:11)
GKG	RRGQRGKNRG	(SEQ ID NO:12)
RGKG	RRGQRGKNRG	(SEQ ID NO:13)

SRGKG RRGQRGKNRG (SEQ ID NO:14)

NSRGKG RRGQRGKNRG (SEQ ID NO:15)

ENSRGKG RRGQRGKNRG (SEQ ID NO:16)

PENSRGKG RRGQRGKNRG (SEQ ID NO:17)

SPENSRGKG RRGQRGKNRG (SEQ ID NO:51)

NPENSRGKG RRGQRGKNRG (SEQ ID NO:18)

ANPENSRGKG RRGQRGKNRG (SEQ ID NO:19)

A ANPENSRGKG RRGQRGKNRG (SEQ ID NO:20)

AA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:21)

AAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:22)

QAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:23)

RQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:24)

~~NRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:25)~~

~~RNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:26)~~

~~ERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:27)~~

~~RERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:28)~~

~~RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:29)~~

~~P RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:30)~~

~~LP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:31)~~

~~VLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:32)~~

~~AVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:33)~~

~~MAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:34)~~

~~QMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:35)~~

~~KQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:36)~~

~~DKQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:37) and~~

~~PDKQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:38)~~

or a substitution or deletion variant of X, wherein said variant is in excess of 70% identical to an amino acid sequence of X as set forth above when four gaps in a length of 100 amino acids may be introduced to assist in that alignment, and

(b) a pharmaceutically acceptable vehicle.

45. **(Currently Amended)** A method for affecting the survival or function of neurons comprising administering a pharmaceutical composition comprising:

(a) a truncated glial cell line-derived neurotrophic factor (GDNF) protein product consisting of an amino acid sequence

$X\text{-}(Cys^{41}\text{-}Cys^{133})\text{-}Y$

wherein

$(Cys^{41}\text{-}Cys^{133})$ consists of Cys^{41} through Cys^{133} of SEQ ID NO:2;

Y represents the carboxy terminal group of Cys^{133}, a carboxy-terminus amino acid residue of Ile^{134}, or a substituted amino acid residue, and

X represents a methionylated or nonmethionylated amine group of Cys^{41} or amino-terminus amino acid residue(s) selected from the group:

C2 cont.

	G	
	RG	
	NRG	
	KNRG	(SEQ ID NO:3)
	GKNRG	(SEQ ID NO:4)
	RGKNRG	(SEQ ID NO:5)
	QRGKNRG	(SEQ ID NO:6)
	GQRGKNRG	(SEQ ID NO:7)
	RGQRGKNRG	(SEQ ID NO:8)
	RRGQRGKNRG	(SEQ ID NO:9)
G	RRGQRGKNRG	(SEQ ID NO:10)
KG	RRGQRGKNRG	(SEQ ID NO:11)
GKG	RRGQRGKNRG	(SEQ ID NO:12)
RGKG	RRGQRGKNRG	(SEQ ID NO:13)
SRGKG	RRGQRGKNRG	(SEQ ID NO:14)
NSRGKG	RRGQRGKNRG	(SEQ ID NO:15)
ENSRGKG	RRGQRGKNRG	(SEQ ID NO:16)
PENSRGKG	RRGQRGKNRG	(SEQ ID NO:17)
SPENSRGKG	RRGQRGKNRG	(SEQ ID NO:51)
NPENSRGKG	RRGQRGKNRG	(SEQ ID NO:18)
ANPENSRGKG	RRGQRGKNRG	(SEQ ID NO:19)
A ANPENSRGKG	RRGQRGKNRG	(SEQ ID NO:20)
AA ANPENSRGKG	RRGQRGKNRG	(SEQ ID NO:21)
AAA ANPENSRGKG	RRGQRGKNRG	(SEQ ID NO:22)
QAAA ANPENSRGKG	RRGQRGKNRG	(SEQ ID NO:23)
RQAAA ANPENSRGKG	RRGQRGKNRG	(SEQ ID NO:24); and
~~NRQAAA ANPENSRGKG~~	~~RRGQRGKNRG~~	~~(SEQ ID NO:25)~~

~~RNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:26)~~
~~ERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:27)~~
~~RERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:28)~~
~~RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:29)~~
~~P RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:30)~~
~~LP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:31)~~
~~VLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:32)~~
~~AVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:33)~~
~~MAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:34)~~
~~QMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:35)~~
~~KQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:36)~~
~~DKQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:37) and~~
~~PDKQMAVLP RRERNRQAAA ANPENSRGKG RRGQRGKNRG (SEQ ID NO:38); and~~

C2 cont.

(b) a pharmaceutically acceptable vehicle.

46. (**Currently Amended**) A method according to Claim 30 or 45 wherein X is selected from the group consisting of SEQ ID NO: 3, 7, 8, 14, 17, 24, 51 and 18.

47. (**Previously Added**) A method according to Claim 30 or 45, wherein X is G, RG or NRG.

48. (**Previously Added**) A method according to Claim 30 or 45, wherein said GDNF protein product has the amino acid sequence of SEQ ID NO:42.

49. (**Withdrawn**)

50. (**Withdrawn**)